UNION CARBIDE

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 6 - No. 2 January 23, 1975

158325

QUESTION BOX ??

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, **Nuclear Division News.** *(Or telephone it in to your plant news representative.) You may or may not sign your name. It will not be used in the paper.*

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: We know that PLV (pay in lieu of vacation) must be accompanied with a week off (vacation). Why can't fragmented vacation be applied to accompany PLV?

ANSWER: Pay in lieu of vacation (PLV) is not intended to be an earnings supplement. Rather, it was designed to enable eligible employees to take pay for a portion of their regular vacation time so that they might have a sum of money to help defray the expenses of their vacation.

This purpose would not be accomplished if PLV could be taken with fragmented vacation. Under the provisions of the Vacation Plan, PLV currently is available to employees with 10 or more years of service, provided it is requested concurrently with a full week of actual vacation time.

QUESTION: Y-12 employees are all aware of our recent safety performance. We should be proud and I believe we are.

We had OSHA introduced to us recently. Everyone talks "safety first," but when a hazard exists and a safety suggestion is turned in, it takes two to six months, or more in some cases, to solve the problem. Why? During this period a serious accident could occur. Maybe the plant should have an additional maintenance crew assigned to work with the safety department to investigate these safety suggestions and solve these problems without the interruption of the regular shift maintenance performance of the plant operation.

ANSWER: Y-12 management encourages prompt reporting of safety hazards. They should be reported to the employee's immediate supervisor either verbally or by using the Safety Suggestion Form, UNC-2254. The Safety Department assists supervision by evaluating such reports and corrective actions are assigned a priority. Immediate action is taken to correct conditions which pose imminent danger. Less priority is given those items which are borderline but might improve safety if they were done. Some investigations fail to confirm the existence of any hazard and no action is taken.

An employee reporting a safety hazard or making a recommendation should be given a reply by his supervisor as soon as possible concerning the results of the review. The time required to take corrective action would depend on the priority assigned. The employee should not hesitate to check the status of any suggestion with his supervisor. If he thinks things are moving too slowly, he should feel free to discuss the matter with members of the Safety Department staff.

Y-12 management is also proud of the excellent safety performance its employees have achieved over a period of many years.

QUESTION: Regarding secretarial classifications, why and how would a secretary that has many fewer years of company service and experience who works for a department head who reports to the same division head have a higher classification than a

(Continued on page 10)

IN THIS ISSUE

"J. Q. CARBIDE REPORT" — Sherry Bright, Y-12 Superintendents Division, looks over a preview copy of her "J. Q. Carbide" benefits at Union Carbide. A copy of "Your Benefits at Union Carbide" will be mailed shortly to all Nuclear Division employees.

Benefits at Union Carbide report to be mailed soon

Another "J. Q. Carbide" computerized benefits report will soon go in the mail to all Nuclear Division employees. "Your Benefits at Union Carbide," broken down into five sections, is personalized to fit each employee, according to his or her earnings and Company service.

This is the fifth such benefits report since the first was mailed to employees in 1958. The most recent distribution went to employees in 1971. Major improvements have been made in many of the benefits since the last "J. Q. Carbide" composite was mailed.

Cost estimates

A new feature in this year's report will be two cost estimates. Each employee will be shown how much it would cost at age 65 to purchase an annuity in the same amount as his or her prospective Union Carbide pension. A second estimate will show each employee the annual cost to the Company for his or her benefits shown in the report. While this number will be larger than most employees would have thought, it still does not represent the full cost of the Nuclear Division's benefits package. This is because another substantial expenditure involves pay for time not worked, such as vacations and holidays, which is included in the

(Continued on page 10)

Neutral injection systems added to ORNL's ORMAK

Fusion researchers at Oak Ridge National Laboratory have completed the installation of two neutral injection systems and a liquid nitrogen subcooler in the ORMAK device, the Laboratory's principal experimental machine for research in thermonuclear fusion.

The addition of the injection systems brings to four the number of such systems added to the ORMAK since the device was installed at the Laboratory's Thermonuclear Division facilities in February, 1971. The systems are designed to increase the heat energy of the trapped plasma in the ORMAK by "firing" neutral particles into a toroidal, or donut-shaped, magnetic chamber used to confine the plasma.

Uses Russian model

John Clarke, director of the Thermonuclear Division, said the four injection systems raise the total neutral injected power to approximately 500 kilowatts, making the ORMAK the most powerful injection heating experiment in the world.

The ORMAK device, patterned after the Russian tokamak, is used to study the behavior of plasma (composed of ions and electrons) heated to temperatures of several million Kelvin while confined within the magnetic field referred to as a torus. Experiments with this machine are aimed at the eventual development of thermonuclear fusion power reactors which would produce electricity from the heat energy caused by the fusing of deuterium atoms. This heavy form of hydrogen is available in the lakes and oceans of the world in virtually unlimited supply for centuries to come.

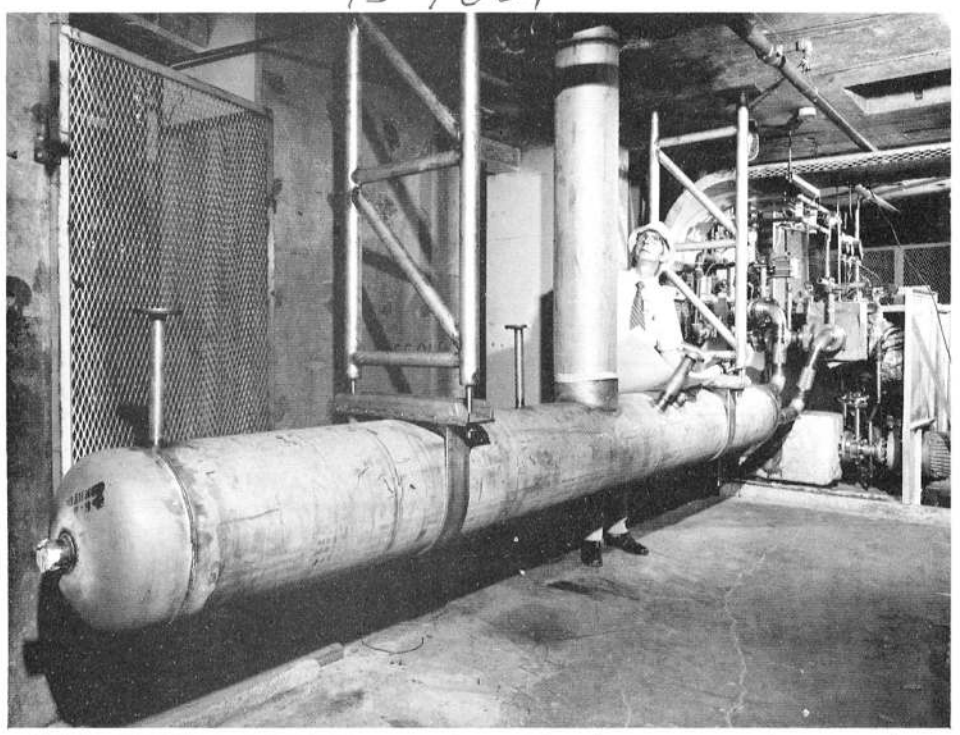
Plasma temperature required to obtain an efficient fusion reaction is approximately 60 million K, with a containment time of approximately one second. Present achievements with the ORMAK device are heating of the plasma to about 6 million K and confinement for about one-fiftieth of a second.

Feasibility studies

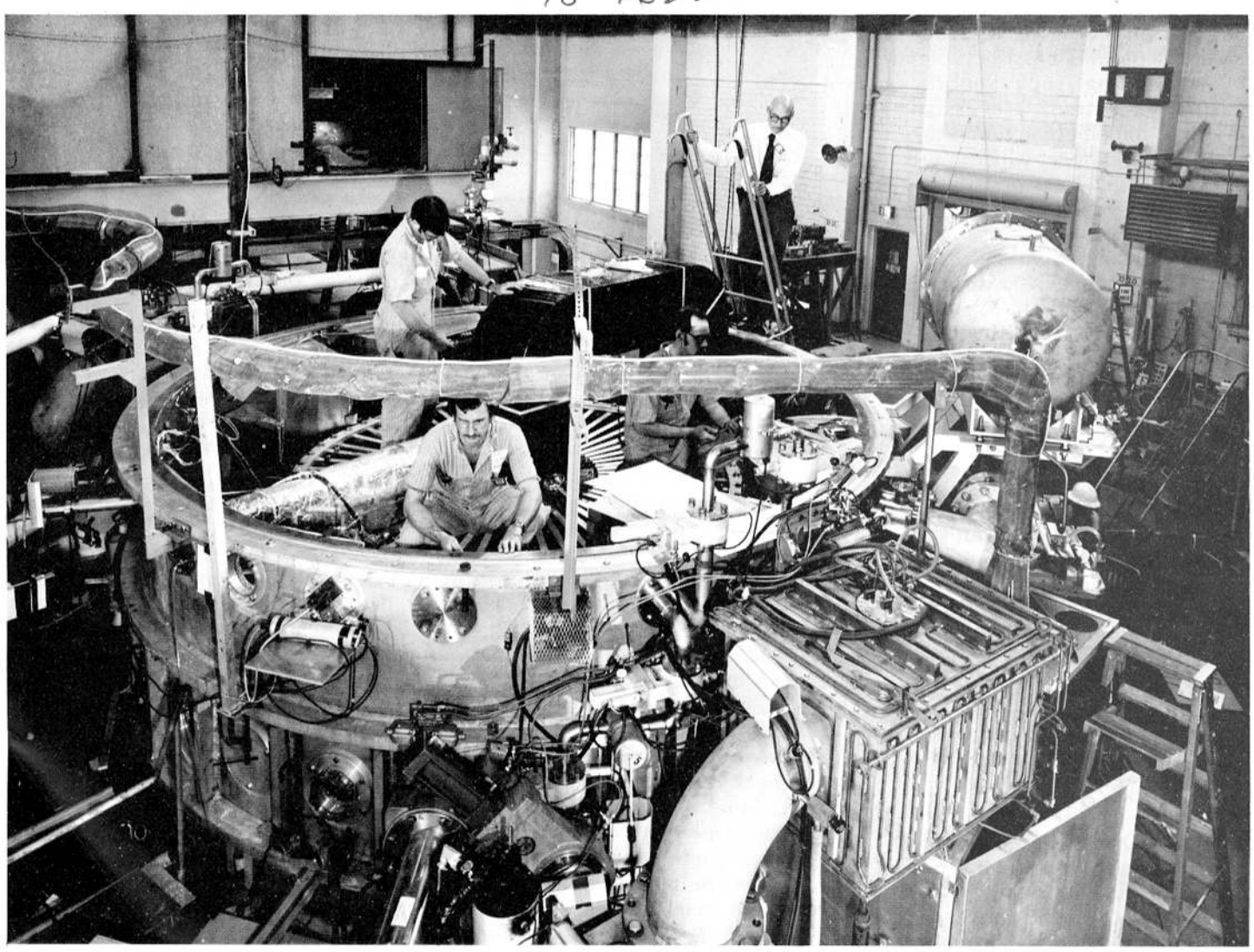
Clarke said that experiments with the ORMAK during the past year have been directed toward establishing the feasibility of using energetic neutral beams as a means of plasma heating and toward determining the scaling of plasma behavior as a function of plasma current. Injection heating experiments performed with the first two injection heaters, installed July, 1973, were successful in increasing ion temperatures up to 40 percent by using a single neutral beam over the range of plasma currents possible in the experiment. He pointed out, however, that still higher ion temperatures with increased injection power and plasma current will be necessary for successful operation of a tokamak fusion reactor.

Tokamak-type injection heating fusion research also is conducted at Princeton Plasma Physics Laboratory, the United Kingdom's Culham Laboratory and at the Kurchatov Laboratory in the Soviet Union.

Clarke also said that the installation of the liquid nitrogen subcooler facility will add to the effectiveness of the experiment by lowering the toroidal field coil temperature of the powerful magnets used in containing the plasma. The temperature will be lowered from 84 Kelvin, which is slightly above the temperature of liquid nitrogen, to less than 70 K. This reduction will allow the increase of the toroidal magnetic field by about 35 percent over the previous 18 kilogauss operating level.



CHILL THOSE MAGNETS! — Engineer Edward H. Bryant, Thermonuclear Division, supervised the installation of the liquid nitrogen subcooler system which will add to the efficiency of the magnetic fields in the ORMAK experiments. The system, shown before insulation of piping, is located in the basement of Building 9201-2.



ADDITIONS TO ORMAK — The lid of the ORMAK containment vessel was removed recently to permit the installation of two new neutral injection heating systems designed to increase the temperature of the plasmas under study. Working inside the vessel are Charles Green, left front, Dennis Weber, right, James M. McGill, standing. Sam M. DeCamp observes from the ladder at right rear.

DIVISION Retirees

Perry

Everett C. Perry, an auditor in General Accounting, will retire at the end of January, closing out 24 years of service with Union Carbide. He lives at 106 Wayside Road, Oak Ridge.

Next Issue

The next issue will be dated February 6. The deadline is January 29.

NUCLEAR DIVISION NEWS

UNION CARBIDE

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More details on organizational changes in Engineering at ORNL

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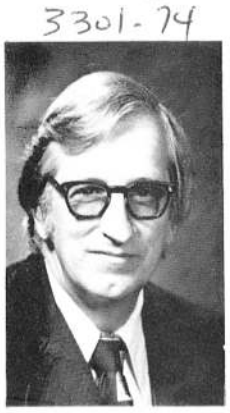
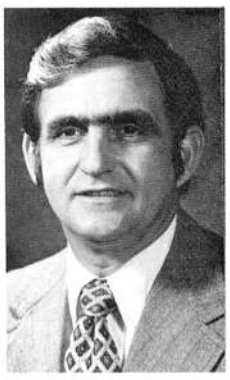


Davis



Cannon

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Crowley

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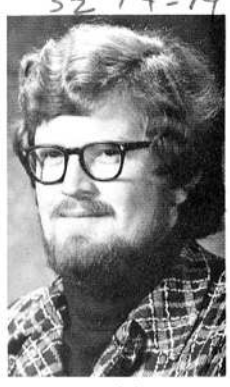

Stoddart

Siman-Tov

The editors of **NUCLEAR DIVISION NEWS** apologize for several omissions that were made in the story on organizational changes in Nuclear Division Engineering at ORNL in the last issue. Additional information follows.

The Experimental Engineering organization, which is headed by Hugh C. Beeson, was reorganized into four functions: Development Engineering, Experimental Design Engineering, Research Engineering, and Special Projects and Advanced Planning.

Development Engineering is headed by Francis C. Davis. Davis joined the Nuclear Division in 1960. He received the B.S. degree in mechanical engineering from the University of Vermont and an M.S. in engineering mechanics from The University of Tennessee. He is a member of the National Society of Professional Engineers and the Tennessee Society of Professional Engineers.

ORSORT graduate

Research Engineering is headed by Donald D. Cannon, a Division employee since 1959. Cannon received B.S. and M.S. degrees from The University of Tennessee in mechanical engineering and engineering mechanics, respectively. He joined the staff at ORNL in 1959. He is a graduate of ORSORT and a registered professional engineer in Tennessee. Cannon holds membership in the National Society of Professional Engineers and the American Society for Mechanical Engineers.

Loyd V. Wilson is head of Experimental Design Engineering and Layton N. Howell is in charge of Special Projects and Advanced Planning. Both Wilson and Howell previously held positions similar to these.

Within the Engineering Analysis organization, W.K. "Mickie" Crowley heads a section on thermal, hydraulic analysis and nuclear engineering; W. Chris T. Stoddart heads the structural analysis section; and Moshe Siman-Tov is head of the energy conversion systems section. Thomas W. Pickel is manager of Engineering Analysis.

Crowley joined the Nuclear Division staff in 1967. He holds bachelors and masters degrees in nuclear engineering from The University of Tennessee.

B.S. from IIT

Stoddart came to work at ORNL in 1965. He received the B.S. degree in mechanical engineering and an M.S. in engineering mechanics from The University of Tennessee. He is a member of the American Society of Mechanical Engineers.

Siman-Tov has a B.S. degree in mechanical engineering from Israel Institute of Technology, an M.S. in mechanical engineering from the University of Cincinnati, and a Ph.D. in engineering mechanics from The University of Tennessee. He is a member of ASME and the NSPE.

$114 million toll enriching

More than $114 million in toll enriching services were recorded at at the Oak Ridge Gaseous Diffusion Plant during 1974. This compares to $106 million in calendar year 1973, and $75 million in 1972.

Under the toll enrichment program, privately-licensed owners bring their uranium to the gaseous diffusion plant for enriching on a toll basis. Customers are charged for services required to separate from natural uranium the desired percentage of uranium-235 isotope, usually between 2 and 3 percent.

During 1974, reactor facilities in 14 states and 8 foreign countries participated in the toll enrichment program at the gaseous diffusion plants.

It's Possible Now

With present knowledge more than 100,000 additional lives could be saved yearly from cancer if everybody acted on the American Cancer Society's advice to seek early diagnosis and prompt treatment. ACS also says: Get an annual health checkup.

PH 75-77

James T. Bradbury

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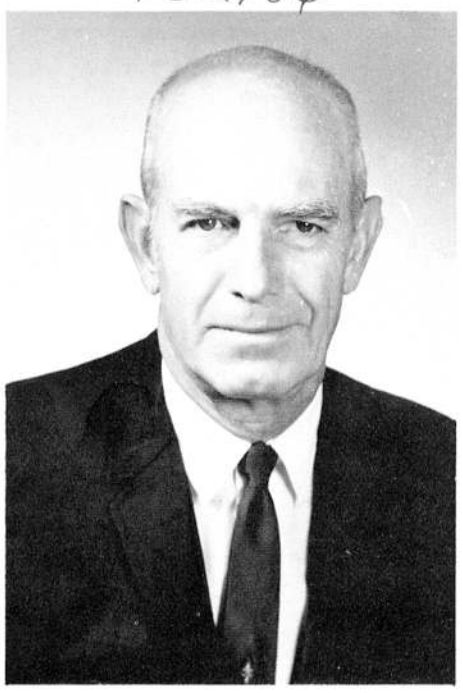


Duncan M. Lang

Bradbury to replace Lang who sets retirement soon

James T. Bradbury has been named Director of Operations Analysis and Planning for the Nuclear Division. Bradbury succeeds Duncan M. Lang, who will retire this spring after being associated with the Oak Ridge facilities for more than 30 years.

In his new position, Bradbury will be responsible for over-all systems analysis and planning for uranium enrichment activities; gaseous diffusion cascade equipment analysis and performance optimization studies; theoretical and economic analysis of a wide range of isotope separation processes; and process analysis at the Oak Ridge Y-12 Plant.

Lang will serve as a special assistant to Paul R. Vanstrum, Vice President for Engineering and Development, until his retirement. He will perform a number of special studies in the general area of uranium enrichment.

Bradbury has served as a development consultant since joining Union Carbide in Oak Ridge in 1970. A native of Ann Arbor, Mich., he received a bachelor of science degree in industrial chemistry from the University of Kentucky, and a master's degree in chemistry from California Institute of Technology. In addition, he holds a master's degree in business administration from the University of Chicago.

Bradbury and his wife, the former Mary Louise Cairns, live at 113 Montreal Lane, Oak Ridge, with their three children.

Lang, who received his bachelor of science degree from the University of South Carolina, has been in Oak Ridge since 1944 when he joined the staff of the Oak Ridge Y-12 Plant. He transferred to the Technical Division of the Oak Ridge Gaseous Diffusion Plant in 1948 and became superintendent of that division in 1954.

In 1963 he was appointed Operations Analysis Division Superintendent at the Oak Ridge Gaseous Diffusion Plant, and in 1968 was named to head the Operations Analysis and Long Range Planning for the three production plants of the Nuclear Division.

He is married to the former Eleanor Withers, and they live at 883 West Outer Drive, Oak Ridge.

3322-74

"CAN YOU ESCAPE THE REALM OF THE UNSAFE?" — J. Paul Blakely, ORNL's Information Division, checks the handcuffs on Austinini the Magician, prior to his escape from the handcuffs, leg irons and a packing crate. This feat was part of Austinini's "Safety Seance" performance for the Division's fourth quarterly safety meeting. From left are Debra Embleton, Austinini's Assistant who works in ORGDP's Operations Division; Austinini (Larry A. Austin, Y-12 Product Certification); and Blakely.

ERDA HEAD TAKES OATH — Robert C. Seamans takes the oath of office as administrator of the newly created Energy Research and Development Administration. The oath was administered by John Ratchford, right, of the White House Staff. Mrs. Seamans, center, and their son, Daniel, were present for the ceremony.

ERDA is new administrator for all nuclear activities

Robert C. Seamans took the oath of office recently as Administrator of the newly created Energy Research and Development Administration.

The ceremony took place in Seaman's temporary Washington offices at Seventh and D Streets SW, and the rites were administered by John Ratchford of the White House Staff. The offices opened there recently with a small transition staff.

Under reorganization legislation signed by President Ford last October, ERDA becomes the agency with overall responsibility for federal research and development of energy sources. The reorganization was to be effective this week.

Seamans, former Deputy Administrator of the National Aeronautics and Space Administration and former Air Force Secretary - and more recently President of the National Academy of Engineering - was confirmed by the Senate in mid-December.

ERDA will be comprised of research and development units and functions transferred from the Department of Interior, the National Science Foundation, the Environmental Protection Agency, and the Atomic Energy Commission.

The greatest object in the universe, says a certain philosopher, is a good man struggling with adversity; yet there is still greater, which is the good man that comes to relieve it . . . Oliver Goldsmith

NEW ORGDP AMBULANCE — A new modular design ambulance is now on duty at the Oak Ridge Gaseous Diffusion Plant, providing room for one or two patients and the latest equipment in life-saving gear. Fire drivers B. S. Austin, left, and H. E. Smiley are seen with the new vehicle.

Ferris, Hahn and Thomas new section chiefs in Chemistry

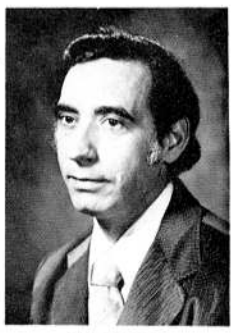
3275-74 3277-74

The appointments of three section chiefs with responsibility for major areas of research within the Chemistry Division at Oak Ridge National Laboratory have been announced by Division Director O. Lewin Keller.

Creation of the three sections is part of a reorganization to strengthen the Chemistry Division's scientific base to handle all types of chemistry, from fundamental research to more applied problems. It also includes the transfer of about 20 staff members from the Chemical Technology Division to the Chemistry Division.

The newly appointed section chiefs are: Leslie M. Ferris, Inorganic and Organic Chemistry; Richard L. Hahn, Nuclear Chemistry; and Iran L. Thomas, Physical and Engineering Chemistry.

Ferris Hahn



Thomas

Ferris, a native of Fargo, N. D., received the B.S. degree in chemistry and the M.S. degree in physical chemistry at North Dakota State University. In 1955, he joined the Chemical Technology Division where he was involved in research on molten salt chemistry, carbides and nitrides and the chemistry of processing various power reactor fuels.

Ferris and his wife, Darleen, live at 4605 Crestfield Road, Knoxville. They have three children, Susan, Steve and Sandra.

Hahn worked at Brookhaven National Laboratory before he joined the Analytical Chemistry Division as a research chemist in 1962, transferring to the Chemistry Division in 1967. A native of New York City, he received his B.S. degree in chemistry at Brooklyn College and his M.A. and Ph.D. degrees in nuclear chemistry at Columbia University. His work at ORNL has included research on nuclear reactions, with emphasis on the use of heavy-ion beams at the Oak Ridge Isochronous Cyclotron, and nuclear studies on man-made elements. In addition to his new position as section chief, Hahn is director of the Transuranium Research Laboratory.

Hahn and his wife, Sheila, live at 117 Netherland Road in Oak Ridge with their three daughters, Sharyn, Jill and Pamela.

Thomas joined the Chemical Technology Division in 1967 where he was primarily involved in theoretical chemistry. In 1973 he worked in the Director's Division with Associate Director Alexander Zucker. He received his B.A. from McMurry College in Texas and his Ph.D. in chemistry at Vanderbilt University.

Thomas and his wife, Barbara, live at 125 Newhaven, Oak Ridge. They have two daughters, Sharene and Lauren.

Spangler appointed technical advisor

Donald E. Spangler, a certified engineering technician of the Oak Ridge National Laboratory's Chemical Technology Division, has been appointed to the chemical engineering advisory board of the State Technical Institute, Knoxville. Members of this advisory board donate their time to helping the school produce educational programs that are useful to industry and to the progress of the community.

Spangler

3306-74

Spangler is a native of East Tennessee, and has worked in the field of radioactive chemical processing for 27 years. He was a member of the force which tested and developed many processes (Redox, Purex, Thorex, Metal Recovery, etc.). Spangler previously worked with Martin Marietta Corp., Nuclear Division, where he assisted in the development and production of strontium-90 fuel elements for SNAP generators. He is presently assigned to the coal conversion process development program at ORNL.

Spangler is a member of the Oak Ridge-Knoxville Chapter of the American Society of Certified Engineering Technicians. He serves as a member of the chapter program committee.

He and his wife, Martha, live in Lenoir City. They have six children.

PRSA group names Cobert president

Harvey I. Cobert, Director of Public Relations for the Nuclear Division, has been elected president of the Volunteer Chapter of the Public Relations Society of America. He succeeds Sammie Lynn Puett, executive assistant to the chancellor of The University of Tennessee.

Other officers of the society, which is composed of public relations managers in the East Tennessee area, include: Jackie Kersh, UT Municipal Advisory Service, vice president; Judy Statzer, State Advisory Council on Vocational Education, secretary; and Dan Coleman, UT, treasurer.

15 8163

Frances Ball named EMSA secretary

Frances L. Ball, ORNL's Molecular Anatomy Program, has been elected Council Secretary of the Electron Microscopy Society of America.

Miss Ball

The EMSA, which was organized in 1942, currently has over 2,500 members. Its purposes include increasing and diffusing the knowledge of both the science and practice of electron microscopy including the instruments and results used in electron microscopy.

Miss Ball is a native of Murfreesboro. She received a B.S. degree in chemistry and mathematics from Middle Tennessee State University and a masters degree in organic chemistry from Vanderbilt University. Her work experience includes teaching algebra at Central High School in Murfreesboro.

In 1949, Miss Ball joined the Nuclear Division at the Oak Ridge Gaseous Diffusion Plant. She worked in the ORGDP Physics Division prior to her official transfer to the MAN Program in 1969.

Electron microscopy has played an essential role in the Man Program's development of zonal centrifuges. Miss Ball's work has included the influenza virus purification studies that resulted in the production of purified flu vaccine, and investigations of viruses suspected to cause infectious hepatitis and serum hepatitis.

Miss Ball is co-author of a quantitation study that has established the minimal concentration for small viruses that can be detected with the electron microscope. She was also involved in isolation of the enzyme ribulose diphosphate carboxylase from sulfur bacteria.

Miss Ball is currently responsible for the electron microscopic studies of unique materials being developed in the MAN Program for potential diagnosis and therapy of human cancers. These materials are biochemical compounds derived from tumors and specific antibodies immobilized on inert supports. Ultrastructural studies of these supports and attached tumor antigens or antibodies provide a basic understanding of the separation process and contribute to the future design of practical therapeutic systems.

Miss Ball has been a member of EMSA since 1953, and is also a member of Sigma Xi. She resides at 502 Riverside Drive, Clinton.

PAY TASK FORCE — A recent discussion of the pay task force took place in the Nuclear Division. Meeting in the President's office are, from left, William J. Wilcox, Joseph E. Smyrl, Patrick C. Fourney, Manager of Employee Relations; J. Alton Elkins, Jack M. Case, Donald B. Trauger, Alex Zucker, George R. Jasny, Roger F. Hibbs, Nuclear Division President; and Robert A. Winkel.

'Pay task force' makes recommendations to Hibbs

A "Pay Task Force" has been working for several months to review the overall pay program for the Nuclear Division and to recommend ways in which the program might be improved. Results of the task force's deliberations were discussed recently with Roger F. Hibbs, Division President.

Members of the task force included: Jack M. Case, Manager, Oak Ridge Y-12 Plant; J. Alton Elkins, Division Manager of Finance; Clyde C. Hopkins, Manager, Paducah Gaseous Diffusion Plant; George R. Jasny, Division Director of Engineering; Joseph E. Smyrl, Division Manager of Salary Administration; Donald B. Trauger, ORNL Associate Director for Reactor and Engineering Sciences; William J. Wilcox, Division Technical Director; Robert A Winkel, Manager, Oak Ridge Gaseous Diffusion Plant; and Alex Zucker, ORNL Associate Director for Physical Sciences.

Areas discussed

One of the major areas discussed was the need to continue the salary communications program. Hibbs emphasized that discussion of an individual's salary should be a basic part of the annual employee appraisal program which has been established in the Division. "Each salaried employee should know the minimum and maximum of his job, where he stands in the rate range, and the outlook for him for the future," Hibbs said.

The committee felt it important that salary program recommendations generated in the Nuclear Division were considered during the Corporate salary program planning. Hibbs pointed out that the Nuclear Division is represented on the Corporate Salary Committee. "The overall salary program is established by the Corporation," he explained. "However, where we have recommendations we are in a position to present these recommendations and to seek support from other divisions, and the Corporation in gaining approval for them," he explained.

Job classifications

Also discussed was the need to certify consistent and equitable use of job classifications across the Nuclear Division. It was pointed out that two programs are currently under way in the area of job analysis. First, we are currently engaged in a process of reevaluating all exempt salaried positions throughout the Nuclear Division. This reevaluation program will be completed by June 30, Hibbs noted. In addition to the reevaluation program a job analysis group, has been established to review all salaried positions on a continuing basis in an effort to achieve and maintain equity of job classification usage throughout the Nuclear Division.

The Pay Task Force actively reviewed and made recommendations for application of the 1974 salary program revisions. The task force indicated to Hibbs that in its judgment the 1974 program, as modified, was adequate and well received by the employees. The committee members have also reviewed the proposed program for 1975 and indicated that they anticipate that it, too, will be well received.

The Pay Task Force will continue to play a strong part in the formulation of salary policy and its administration.

Y-12er, ORNLer's son take honors in UT commencement

15 4878

Graduation exercises at The University of Tennessee proved interesting to Nuclear Division families, as an employee and an employee's son took top honors in two different schools.

Kirby

Charles "Andy" Kirby, son of Charles O. Kirby, General Engineering Division, was graduated first in the college of engineering. His 3.82 average was highest among the 100 engineering students. He is a member of two honorary fraternities, Phi Kappa Phi and Tau Beta Pi.

An Eagle Scout, Kirby plans to attend UT Medical School. He was awarded the Charles Vanden Bulck Memorial scholarship on his graduation from Oak Ridge High School.

Homer Moss, a safety engineer in the Y-12 Plant, took top honors in the 170-man class in the college of education.

Moss

Moss, who lives at 210 Virginia Road, Oak Ridge, obtained his degree in industrial education while working full-time. A registered medical technologist, he has been in Y-12 since 1969. Before coming with Union Carbide, he worked with the Fisher Scientific Company and at Memorial Hospital, Forest, Miss.

Dollars Needed

It takes money to win the war against cancer; dollars to support research; money to finance programs teaching the public how to safeguard against cancer. That's why the American Cancer Society is seeking your support now.

H642 1

PADUCAH UNITED WAY SUCCESS — Celebrating the finish of another successful United Way campaign are the above Paducah Plant employees. Average giving per employee now stands at $33.46 at Paducah, the highest in the four Nuclear Division plants. From left are Don George, Massic County (Ill.) representative; William D. Sullivan, representing Paducah-McCracken County; Fred Carter, Paducah Plant Guard Union; Anna Rose Davis, United Appeal chairman for the Paducah Plant; Clyde C. Hopkins, Plant Manager; Gene Rollins, representing Ballard County; John B. Thomason, AFL-CIO union president; and Bill Hale, representing the Mayfield-Grave County United Way.

Paducah leads Nuclear Division in United Way per capita giving

Union Carbide employees at the Paducah Plant have again demonstrated their concern for their communities by increasing United Way giving. A total of $45,475.40 has been raised or pledged to six UW funds in the areas surrounding the Plant.

Anna Rose Davis, Employee Relations Division; J.B. Thomason, Oil, Chemical and Atomic Workers Union; and J.O. Dobson, International Union of Plant Guard Workers, headed the 1974 campaign. All voiced appreciation for the effortless campaign, and for the cooperation of the campaign workers.

Per capital giving increased for the seventh consecutive year in Paducah, with an average contribution of $31.93 increasing to $33.46 for 1974. This is the highest individual ratio of giving in the entire Nuclear Division, a justifiably proud accomplishment for the Kentucky plant.

Miss Davis, in voicing appreciation for the PGDP employees' increased giving this year, noted particularly the low-key campaign conducted this year, and stated, "In view of our inflation, it is gratifying to know that Paducah employees again increased their giving, further proof that they care."

H642 9

UNION CARBIDE GIFT — Clyde C. Hopkins, right, Plant Manager at Paducah, presents William D. Sullivan, with a check for $2,000, representing Union Carbide's gift to the McCracken County United Appeal. Sullivan is executive secretary of the United Appeal in the western Kentucky county.

A breakdown of contributions shows:

McCracken County	$36,660.28
Ballard County	3,653.04
Graves County (Mayfield)	3.059.92
Massac (Ill.) County	1,468.68
Charleston, Mo.	319.36
Marshall County (Calvert City area)	209.84
All Others	104.28
Total	$45,475.40

K-25 Credit Union to meet January 31

The K-25 Employees Federal Credit Union will hold its annual meeting January 31 at the O.C.A.W. Union Hall, Grove Center, Oak Ridge. It begins at 7:30 p.m.

The board of directors, credit committee, supervisory committee and the treasurer will give reports. There will be an election of three board members and one to the credit committee. Nominations for these posts are by petition, precluding any nomination from the floor.

There will be a total of 20 door prizes. All members are urged to attend.

We inherit our relatives and our features and may not escape them; but we can select our clothing and our friends, and let us be careful that both fit us . . . Volney Streamer

Calendar of EVENTS

TECHNICAL

January 29

Cancer Research Seminar: "Herpes Simplex Virus-Cell and Host In-Interactions," Andre J. Nahmias, Emory University. Tower I Conference Room, Building 9207, 12:15 p.m.

January 30

Biology Division Seminar: "What's Going on in the Management System?" John Shacter. Large Conference Room, Building 9207, 3 p.m.

Laboratory Operations and Management Seminar: "Laboratory Overhead," W. R. Ragland. Central Auditorium, Building 4500N, 3 p.m.

COMMUNITY

January 24, 25

Oak Ridge Playhouse presents: "That Championship Season." Playhouse, 8:20 p.m. Admission: $3.

January 25

Oak Ridge Civic Music Association presents: Oak Ridge Symphony Orchestra concert series, Donald Neven, Conductor. Oak Ridge High School Auditorium, 8:15 p.m. Admission: adults $3; students $1.50.

January 26

Art Center Film Club presents: "The Silence," Ingmar Bergman. Jefferson Junior High School, 8 p.m. Admission: adults $1.75; students $1.

Pioneer II power comes from atom

When the Pioneer II spacecraft flew past the planet Jupiter in early December, the data and pictures it sent back to earth were made possible by four nuclear batteries.

The four batteries, technically called radioisotope thermoelectric generators (RTG's), have survived the 20-month, 620-million-mile odyssey which began at Cape Kennedy, Fla., in the spring of 1973. The RTG's convert heat directly into electricity.

Four similar nuclear power generators are also on the Pioneer 10 spacecraft which flew by Jupiter last December, and which represent the first use of nuclear electric power aboard interplanetary spacecraft.

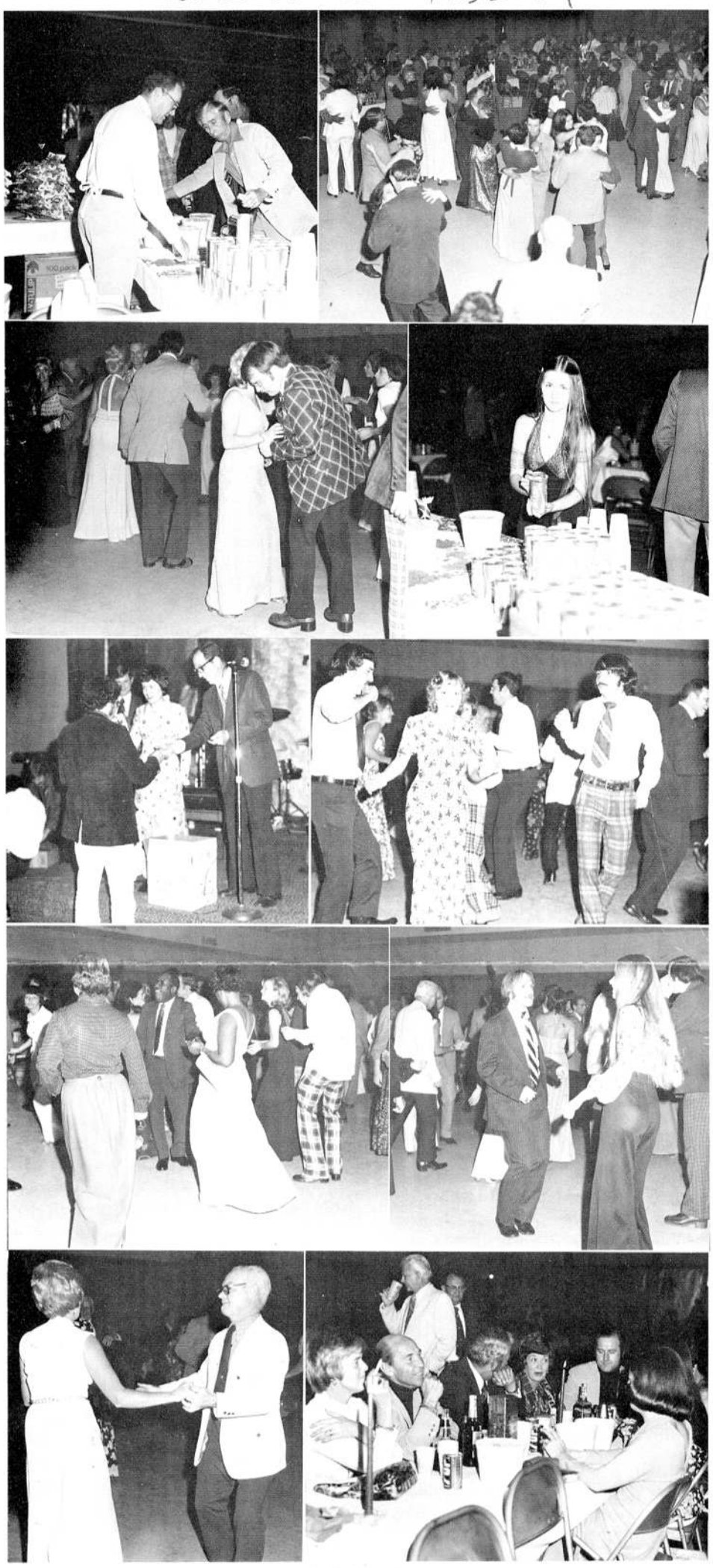
On deep space missions, nuclear generators are the only power sources known that can survive the bombardment of debris in the asteroid belt, high radiation fields, operate independently of the sun's heat, and operate continuously for the entire mission.

NUCLEAR DIVISION SAFETY SCOREBOARD

Time worked without a lost-time accident through January 16:

Paducah	163 Days	1,238,000 Man-Hours
ORNL	41 Days	750,000 Man-Hours
ORGDP	9 Days	176,000 Man-Hours
Y-12	45 Days	1,246,000 Man-Hours

4632-10 — 4632-29



MISTLETOE BALL — Using a holiday theme, employes at the Paducah Gaseous Diffusion Plant gathered for festive times during the recent winter celebrations. Random shots show the happy faces attending the event.

A-batteries still working on moon

Among the many accomplishments of the U.S. space program is the operation of atomic batteries to provide power for the instruments left on the surface of the moon.

While the astronauts have long since left, there remain on the moon five nuclear power generators which were deployed on five of the Apollo missions to permit science stations to send their data back to earth.

November 19 marked the fifth anniversary of the deployment of the first nuclear-powered science station on the moon. This unit and the four succeeding ones continue to operate beyond their one-year life requirement and to provide new dimensions of lunar scientific information.

COMPANY Service 20 25 30

ORGDP
30 YEARS

Bennie H. Fannin, fabrication shop department; Mamie Williams, janitors department; Harlan R. Walls, cascade maintenance department; Herschel E. Williams, maintenance division administration; Durward O. Taylor, mechanical services department; Earl C. Palmer, barrier TIA barrier manufacturing; Henry L. Fellers, utilities operations; Preston W. Honeycutt, utilities operations; Robert P. Thomas, U-235 separations department; Leon G. Rampley, utilities operations; Tommy L. Mathews, cascade maintenance department; Herbert Cleveland, shop services department; Norman A. Teasley Sr., test unit assembly department; James V. Hurley, utilities operations; James W. Grisard, technical evaluation department; James E. Vineyard, cascade maintenance; Noland G. Neely, utilities operations; Ben H. Teague Jr., shift superintendents department; Ruby R. Carruth, central reproduction services; Morgan C. Fuller, cascade maintenance; Harry F. Harris, cascade maintenance; John R. Blair, barrier TIA barrier manufacturing; and Ezra F. Davis, machine shop.

Guy Turner, Process Operations.

20 YEARS

Harry H. Eldridge.

Y-12 PLANT
30 YEARS

Bernard B. Foster, buildings, grounds and maintenance shops; Albert D. Cotton, area 5 maintenance; Azor C. Lee, special services; and Robert L. Ruffin, building services.

25 YEARS

James E. Borum and Gentry B. Alexander.

20 YEARS

Jessie W. Weaver, Thomas H. Bettis, Sherman T. Crisp, Walter S. Hollingsworth, Max L. Dunlap, Ruth R. Thomason, Bertie K. Bristow, Herman Dyer, Russell O. Fann, Dudley L. Jenkins, Sam O. McNeeley and Samuel G. Campbell.

PADUCAH
30 YEARS

William G. Canfield, employee relations department; and C. Emmitt Harless, welding pipe fabrication.

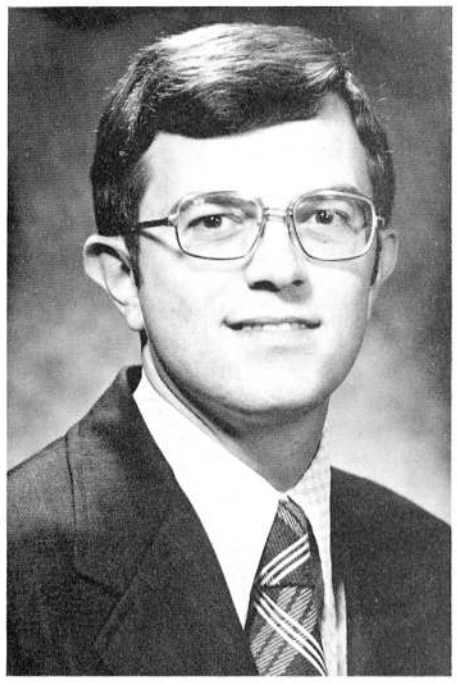
Patents granted

To William J. Werner, Greenville, S.C., formerly of ORNL, for "Filter Alloys for Fluxless Brazing Aluminum and Aluminum Alloys."

To Charles R. Schmitt, Development Division, Y-12, for "Extinguishant for Metal Fires."

To Leonard A. Abbatiello, Robert E. Hewgley Jr. and Paul C. Turner, Y-12 Plant, for "Machine Protection System."

ORNL names new labor relations supervisor



Daniel E. Anderton

The appointment of Daniel E. Anderton as labor relations supervisor at Oak Ridge National Laboratory has been announced by James A. Barker, Director of ORNL's Employee Relations Division.

Anderton, a native of Knoxville, received a bachelor's degree from The University of Tennessee and a doctor of jurisprudence degree from the UT college of law. While attending law school, he worked part-time at Hamilton National Bank.

In October of 1967, Anderton joined the Nuclear Division staff at the Y-12 Plant as an employment representative. He subsequently worked in the Labor Relations Department at Y-12 and was involved in the day-to-day labor relations functions, including contract negotiations and handling of grievance and arbitration cases.

Because of his experience in the field, Anderton was invited to serve as discussion leader for two workshop-type seminars sponsored by the American Management Association. The seminars were held in New York (1972) and Chicago (1973) and were concerned with handling grievances and arbitrations.

Anderton is married to the former Charlotte Dominick. They have two children: Jane and Dan Jr., and reside at 8609 Sandhurst Drive, Knoxville.

WANTED

ORNL

JOIN CAR POOL from Sutherland Avenue, West Knoxville, to East Portal 8 or 8:15 a.m. shift. Diane Rook, plant phone 3-6731; home phone Knoxville 584-3712.

ORGDP

NEW CAR POOL member from Dixie Lee Junction section, to ORGDP Portals 2 or 4, straight day. Loren Carey, plant phone 3-3258, home phone Lenoir City 986-3152.

RECREATIONOTES

Is there an electric car in your future?

There may be an electric car in your future.

The United States has a dwindling supply of domestic petroleum reserves and many of its major cities have major smog problems.

Automobiles now are almost totally dependent on petroleum based fuels. If the U.S. is to maintain its mobility, achieve energy self-sufficiency and clean up its smog problems, reduction of petroleum consumption by highway vehicles is desirable.

Energy Research and Development Administration researchers feel an electric car with about the same driving characteristics as present-day models is one way to alleviate these problems. Since most driving trips are short range, the car could be recharged at home at night when the demand for electricity is low, thus making it an attractive method of off-peak electrical power storage.

For an electric car to be practical, an adequate energy storage system is required. Argonne National Laboratory, near Chicago, has been developing a high energy, rechargeable electric battery which looks very promising.

This lithium-sulfur battery, with up to 10 times the amount of storage capacity per pound as conventional lead-acid batteries and sufficient power per pound for an electric automobile to have acceleration and hill-climbing abilities comparable to present cars, would have a range of 100 to 250 miles per charge, depending on vehicle design and the type of driving cycle used.

Recharge time, which takes up to five hours, depending upon the state of discharge, could easily be accomplished at night with off-peak power.

ORNL BOWLING

The Ten Pins and Limits came roaring into the second half of the A League, downing the Half Frames and Termites for the full count. The Pins scored an even 300 handicap series.

The C League came back, too, rested from the holidays, and features the Beryls and Remkeys tied for first place, with the Pin Heads, Knuckleheads and Trupers close behind. Joe Cable, Pin Heads, posted high series recently with a 633.

In the ORNL Ladies League, the Coolettes bounded out to take the full count from the Strikettes. Mary Long's 505/610 series opened the season's second half for highs.

The Four H's took an opener from Team No. 1 in the Carbide Family Mixed League . . . as Charles Hinton and Lois Bradley came up with series of 634 and 614 handicap respectively.

THE LAST WORD

When a woman really loves a man, he can make her do anything she wants to.

ORGDP FISHING RODEO

The Oak Ridge Gaseous Diffusion Plant completed its last half of 1974 fishing contest recently, and announced the following winners:

LARGEMOUTH BASS
1. A. C. Heitzman
2. Gordon W. Cagle
3. N. D. Rathbone
4. H. D. Adkins

SMALLMOUTH BASS
1. Geneva McClendon, wife of J.D.
2. J. E. Harvey
3. H. E. Walters (Retired)
4. Bill Price

STRIPE (White Bass)
1. Gary Walters, son of H. E.

BREAM (Bluegill)
1. A. H. Sides
2. Wanda Sides, daughter of A.H.
3. C. W. Castle
4. Stephen Castle, son of C. W.

CRAPPIE
1. J. H. Fletcher

MUSKIE
1. John Epling

ROCK AND HYBRID
1. A. D. Reeder
2. Madelyn Rathbone, wife of N.D.

ROUGH FISH
1. Susan Castle, daughter of C.W.
2. Robert F. Hyland
3. W. H. Adams

SAUGER
1. J. L. Woody, Jr.

TROUT
1. J. G. Jones
2. R. T. Beasley

WALLEYE
1. Mrs. H.E. Walters

Prizes for the ORGDP winners may be picked up at Building K-1001, Room C-136, or by telephoning 3-3434.

Y-12 BOWLING

Y-12's C League opened with three teams on top, the Rounders , Badgers and Sunflowers, all with spotless records through two nights of play. Amos Shamblin rolled a 236/258 game while Bill Ladd, in his usual effortless manner, posted series of 639/651!

Y-12's Classic League finds a stranger on top of standings, the Apollo Five team, with no losses thus far. Harold Zang rolled high early in the season, posting a 268 scratch game . . . while Bill Ladd posted high also with a handicap single of 289 . . . and a series of 699 SCRATCH, 765 handicap!

The Goofers stand alone in the Y-12 Mixed League, with no losses, as the Friskies breath close by, one point away. C. R. Lively put a 257 handicap game away, while Terry Humphreys counted a 639 series.

ORGDP BOWLING

ORGDP's Wednesday League ended in a tie for honors for the first half, with the Planners and Amps in a playoff sometime this month. Calvin Wright had a 248/278 game just before the holidays to wrap up singles highs . . . in the new season it was Jim Hutton with a 259 handicap game and a 641 handicap series.

ORGDP's Women's League reports in with the lead to the Payoffs, three and one-half points away from the Uptowners. Charlene Castle's 516/639 series registered high early in the year.

The Tuesday League still belongs entirely to the All Stars, 31 and one-half points ahead of the Atomcs. J.C Patrick put some fancy scores away to start off the post-holiday rolling with singles of 213/241; and series of 534/618.

PRIZE CATCH — George T. Riggs, Y-12, displays a prize-winning rockfish, which netted him first place in the hybrid class for the last half of 1974. The fish weighed in excess of 18 pounds.

ORNL FISHING RODEO

Oak Ridge National Laboratory announces the following winners in this last of the year fishing contest:

LARGEMOUTH BASS
1. Walter Ohnesorge
2. Jean Beets, wife of Arnold
3. James Thompson, husband of Esther.
4. J. P. Heiskell

SMALLMOUTH BASS
1. H. T. Murrin Jr.
2. Arnold Beets
3. Eddie Bailiff
4. J. L. Anderson

BREAM (Bluegill)
1. Robert Evans, son of E.L.

CRAPPIE
1. Ted Heiskell, son of J.P.
2. Micheline Jones, wife of R.H.

ROCK AND HYBRID
1. D. R. Davis
2. W. T. Bostic
3. Robert E. Coleman

ROUGH FISH
1. W. J. Martin
2. R. T. Santoro
3. David Akers, son of W.H.

SAUGER
1. F. S. Adams
2. L. E. Lebo
3. James L. Moore

TROUT
1. Dennis E. Sproles
2. R. B. Irwin

WALLEYE
1. G. E. Pierce
2. Kevin Hurt, son of Sam S.
3. Georgia Jernigan, wife of T.B.
4. Kathleen Howard, wife of W.L.

ORNL winners may pick up their awards at Building 2518, Room 113, or by telephoning 3-1328.

Y-12 FISHING RODEO

Y-12 concluded its 11-species fishing contest for the last half of the year, and counted the following winners:

LARGEMOUTH BASS
1. Jack W. Schaefer Jr.
2. Fay S. Hahn
3. Dwayne Hickson, husband of M.D.
4. C.A. Cooper Jr.

SMALLMOUTH BASS
1. Son of J.B. Wade
2. John Mowery, son of G.D.
3. Charles Campbell Jr.
4. Toby Steele, son of A.G.

STRIPE (White Bass)
1. Golda Caylor, wife of G.H.

BREAM (Bluegill)
1. R. E. Belcher
2. J. W. Gossage
3. A. H. Hunter

CRAPPIE
1. J. B. Wade
2. G. H. Caylor
3. Gene Hickson, son of M.D.
4. H. T. Potter

MUSKIE
1. Gary L. Bowers
2. Elmer E. Green

ROCK AND HYBRID
1. George T. Riggs
2. A. L. Everett
3. Carl D. St. Onge
4. Keith St. Onge, son of C.D.

ROUGH FISH
1. Gail Martin, wife of L.F.
2. H. A. Price
3. Sammy J. Maner
4. Wife of Joe Jackson (Retired)

SAUGER
1. R. S. Phillippi (Retired)
2. E. L. Moore
3. Marcia Maner, wife of S.J.
4. J.M. Whatley

TROUT
1. W. B. Ward
2. Joe Jackson (Retired)
3. K. D. Bolling
4. L. Thurman, Jr.

WALLEYE
1. J. W. Graves

Prizes may be picked up at Building 9711-5, or by telephoning extension 3-5833.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

QUESTION: "How long have they been giving tests for thyroid malfunction and should thyroid pills be given to anyone without a test? What effect would it have on a female child of ten years of age? How would it affect the system for the life cycle of a ten-year-old just before she entered womanhood? What would you consider as the toxic effects given to a ten-year-old if she were not supposed to have it?"

ANSWER: In the 1890's, Dr. Magnus-Levy developed a method to measure the consumption of oxygen in tissues in order to study basal metabolism. He noted that crude thyroid hormone, when given to animals, increased their oxygen consumption. The basal metabolic rate or BMR test evolved from his observations. About the same time, several early biochemists observed iodine in the blood and thyroid gland and developed a crude test for it. The presently used protein bound iodine (PBI) test was developed from these early studies. Several measurements of thyroid hormone level now used can reasonably be said to have originated in 1911 when diiodotyrosine, a compound which is an important step in the manufacture of the thyroid hormone, was first isolated.

BMR test imprecise

Different aspects of thyroid function can be measured by several laboratory tests. The BMR test is so imprecise that it is now seldom used. T^3 is triiodothyronine and T^4 is thyroxine, which are the two main thyroid hormones stored within the thyroid gland. These hormones are released into the blood and reach all tissues where they regulate the rate at which oxygen is burned to use up body fuels. Normal persons have 100-200 nanograms per 100 ml of blood of T^3 and 4 to 11 micrograms of T^4. The protein bound iodine (PBI) test should be between about 4 to 8 micrograms. It normally closely parallels the T^4 test but is completely nullified if the patient has taken iodine containing compounds in medicines or X ray dyes.

The uptake of radioactive iodine, ^{131}I, is often used to measure thyroid function and is especially useful if one needs to determine whether or not a thyroid nodule is manufacturing hormone. The uptake has come down noticeably in recent years due to increased quantities of iodine used in the manufacture of bread. Normal uptake is about 15 percent to 45 percent of the administered dose. Other more complicated thyroid function tests are available and are used when the simple tests give conflicting results or more information is needed on whatever aspect of thyroid physiology seems not to be functioning correctly.

In the past, and to a lesser extent now, thyroid hormone has been prescribed for thousands of obese patients despite the overwhelming evidence that hypothyroidism rarely, if ever, accompanies obesity. It has been widely prescribed for fatigue and vague "lack of pep" syndromes. With all the excellent thyroid function tests now available, there is no justification for prescribing thyroid hormone until a deficiency has been proven. Fortunately, even when given without any need, it doesn't do much harm since the artificially administered thyroid hormone is interpreted by the pituitary gland as an excess. As a consequence, it produces less thyroid stimulating hormone and gradually the thyroid settles down to manufacturing only enough so the total of the natural and the administered hormone is back to normal. Thus the normal person is only substituting some external hormone in the form of pills for hormone produced by his own thyroid. His gland just slows down its production so the balance is maintained. Tampering with this delicate feedback mechanism is ill-advised.

Hormone influences growth

Thyroid hormone influences growth and development. The ten-year-old girl, if she were severely hypothyroid, might have a modest delay in her menarche, the time of her first menstrual period. Prescribing enough thyroid hormone to bring her up to natural levels would be logical.

Administering thyroid hormone just to try to hasten puberty is bad medicine. Chances are it won't work anyway and could cause toxic symptoms. It is doubtful if any physician would prescribe enough thyroid hormone to cause symptoms of hyperthyroidism to occur, but it is possible. If he did, the patient would become nervous and jittery, would notice muscular weakness, have a tremendous appetite and would be hot in environments where other people felt comfortable or even cool.

It is worth remembering that individuals who have had their thyroid gland removed and therefore have no naturally produced hormone can be controlled on no more than .1 to .2 grams (2 or 3 grains) of thyroid per day.

The ten-year-old who was given a small quantity of thyroid hormone will probably not suffer any significant long-term adverse affects. However, such treatment is not logical unless a definite hypothyroidism has been shown after careful testing. Mother Nature has a finely tuned system to control the production of various hormones and unnecessary meddling with it is unwise.

American Physical Society taps ORNL's Loucas G. Christophorou

0011-75

Loucas G. Christophorou, head of the atomic and molecular radiation physics group in the Health Physics Division at Oak Ridge National Laboratory, has been named a Fellow in the American Physical Society.

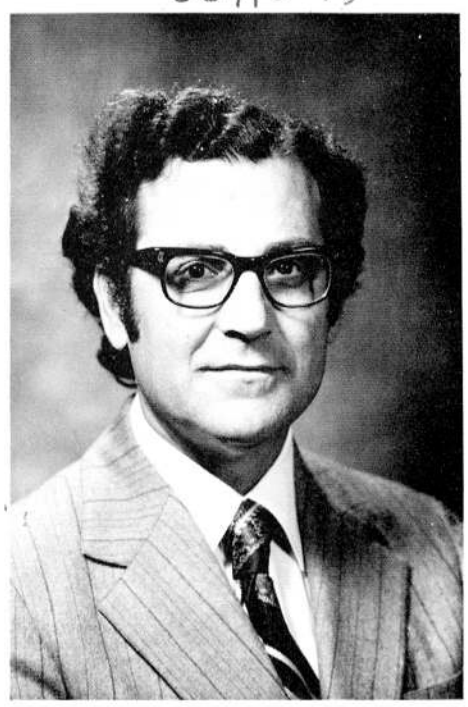
Fellowship in the society is awarded for contributions to the advancement of physics by independent, original research, determined by examination of the published works of a candidate. Christophorou has published more than 80 technical papers and, in 1971, a book, **Atomic and Molecular Radiation Physics.**

The three major areas of his research are: interactions of slow electrons with polyatomic molecules; photophysics of organic molecules; and the synthesis of current physical knowledge, an effort aimed at establishing a physicochemical foundation on which to develop an understanding of problems in radiation and life science.

A native of Cyprus, Christophorou received his B.S. in physics at the University of Athens. He received the M.S. and Ph.D. degrees in physics at the University of Manchester, England, where he also received the honorary D.Sc. degree for his work on the interaction of slow electrons with matter and the physics of polyatomic molecules. In addition to the American Physical Society, he is a member of the Radiation Research Society, the American Association for the Advancement of Science, and the Health Physics Society.

Before joining the ORNL staff in 1965, Christophorou was on the faculty of the Physics Department at The University of Tennessee. He has held his present position since 1966 and, in addition, he continues as a part-time professor of physics at UT.

Christophorou and his wife, Eratoula, live at 121 Nebraska Avenue, Oak Ridge, with their two daughters.



Loucas G. Christophorou

CARNEGIE COURSE

The Dale Carnegie Course covering the areas of Public Speaking, Human Relations, Improving Memory, Leadership Training and Development of of Courage and Confidence is being brought back to the area by Radio Station WPAD-AM and FM in Paducah.

To learn more about what the Carnegie Course will do you call, Bell 442-8231 and a representative will supply you with the necessary information.

ENERGY CONSERVERS

Set thermostats at 68 degrees or below (or use thermostat to maintain heat at that level).

Norris is named to PPA council

Bill K. Norris, supervisor of photographic services at the Y-12 Plant, has been elected a member of the National Council of the Professional Photographers of America, Inc.

Norris

The Council is the national governing body of PP of A, the oldest and largest association of professional photographers in the world. It provides educational services and establishes standards of professional performance for its more than 16,000 members and 160 local, state, regional and international affiliates.

Norris joined Union Carbide in 1952, and in 1973 was appointed head of the photographic services section in the Y-12 Plant. He and his wife, Mildred, who works for the Eaton Corporation, live at Route 2, Harrison Hills, Lenoir City.

Self-pity is a bad habit, a poisonous habit, breeds despair, saps self-reliance. The strong don't indulge in self-pity. They are too busy thinking and working and talking constructively, intent on attaining some goal. They refuse to be cowards, refuse to wear the white feather. They strive to become men. They become men . . . B. C. Forbes

Benefits at Union Carbide

(Continued from page 1)

payroll dollar and is not included in the report.

Read the commentary

In order to understand the report better, an employee should first read the commentary which is on the opposite side from the tabulation of benefits.

When there are medical expenses

The first section of the listing deals with medical expenses . . . showing how hospital room and board (semi-private or ward), surgeons' fees, doctors' hospital visits, other hospital expenses, and maternity expenses for employees and wives of employees are paid.

Major Medical benefits are also explained in the top section, showing that if you are covered by the optional Major Medical Plan, 80 percent of most eligible medical expenses are paid after the deductible for that period is satisfied. The deductible is normally $100 per period per person.

If you become disabled

Disability benefits are explained in the second section, where both temporary and permanent disability coverages are shown. Life insurance payments, Social Security and Pension Plan benefits, all under the disability provision of each plan, are given. Medical plans may be continued by the disabled employee until age 65.

In case of death

Benefits for survivors are shown in the third section in the event of an employee's death. These benefits can include payments from Group Life Insurance, Pension Plan, Savings Plan and Social Security, depending on the deceased employee's age and, in some cases, the age of the survivor.

For your retirement

Income at retirement is presented in the fourth section. These estimates are based, in most cases, on present earnings and projected Company service until time of retirement. Estimated Social Security payments and payment to the spouse are also shown in this section of the benefits report.

Both normal and early full retirement estimates are given. Also shown is the estimated amount of your spouse's Social Security payment when you retire.

Other benefits to the retired employee include retired life insurance which can be drawn down to $1,250 to help pay certain medical expenses, if needed.

Savings Plan payments from the General Savings Fund are made in a lump sum, while payment from the Personal Investment Account may be received in a lump sum or in regular payments stretched over a selected period of time.

Value of benefits

The final section of the benefits report is devoted to the value of your benefits. It points out that the Company pays the full cost for temporary disability benefits while you are disabled, Pension Plan benefits, and basic medical care coverage for you and your family.

You and the Company both contribute to the cost of basic Group Life Insurance, Major Medical, the Savings Plan and Social Security.

In all these categories, these benefits mean money for you and/or your family. The report is structured to show what your entire benefits program looks like and how they all work together to provide you with a sound, comprehensive program of financial protection.

Union Carbide makes substantial contributions toward the cost of an employee's benefits. A series will begin in the near future in the **Nuclear Division News** showing the cost of our "fringe benefits." Many people look on these benefits as additional compensation . . . or a "hidden paycheck."

Division Deaths

Rufus M. Waller Jr., a senior laboratory technician in ORNL's Chemistry Division, died December 31. Mr. Waller had worked at ORNL since April 3, 1954.

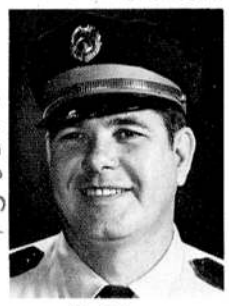
Mr. Waller

Survivors include his wife, Mrs. Lavonda Waller of Route 3, Loudon; three sons, Michael, Gregory and Rufus, III; and mother, Mrs. Alice York Waller, also of Loudon.

Funeral services were held at Karnes Funeral Home in Loudon, with the Rev. W. H. Horner officiating. Burial followed in Waller Cemetery in Roane County.

B. J. McMeans named Y-12 guard captain

Bobby J. McMeans has been named a captain in Y-12's guard department, according to an announcement from Chief W.O. Elam.



McMeans

McMeans, a native of Iuka, Miss., retired from the U.S. Army in 1968 as an intelligence analyst and weapons instructor. He joined Union Carbide shortly after his retirement.

He and his wife, the former Mary Ann Cate, live at 5 Park Avenue, Knoxville. They have three children, a married daughter, Barbara McConnehey; a son, Charles, in the U.S. Navy; and a daughter, Elizabeth, at home.

THE LAST WORD

Flattery, like cologne, should be inhaled and enjoyed, but never swallowed.

QUESTION BOX ? ?

(Continued from page 1)

secretary who has twice as much experience and company service who works for a department head that reports to the very same division head?

The departmental secretary with the higher classification works for a department head with fewer employees reporting to him, has less authority and responsibility (based on facts - not opinion). The departmental secretary with the lower classification has more responsibilities, more varied duties, including important decision-making (that really are not decisions that she should make without being adequately compensated) plus the fact that her supervisor has always indicated and verbally expressed his complete satisfaction with her work and ability to handle decision-making.

ANSWER: If conditions are exactly as you describe, we would expect the differential in pay to be reversed. It is impossible, however, to comment intelligently without knowing more about the case you describe. You should advise the individual involved to discuss the matter with her supervisor or the salary administrator at her location.

FORMER ORNL EMPLOYEES

Two former employees of Oak Ridge National Laboratory died recently.

John E. Morton, formerly an analytical chemist in the Chemical Technology Division, died December 25. He worked at ORNL for over 18 years prior to receiving a disability retirement in 1973.

Mr. Morton is survived by his wife, Mrs. Frances S. Morton, 8108 Hayden Drive, Knoxville; a daughter, Joann; and a son, John Morton.

Monroe L. Wiser died December 31 at his Knoxville home. Mr. Wiser worked as a machinist in the Plant and Equipment Division for over 13 years. He took disability retirement in 1970.

Foreign journalists to visit Oak Ridge

Outstanding young journalists from 12 countries will visit Oak Ridge February 6 and 7 for briefings and a tour of Nuclear Division facilities.

All the journalists are participants in the World Press Institute. The Institute, headquartered at Macalester College, St. Paul, Minn., is a private, nonprofit organization sponsored by American corporations and their foundations. Each year the Institute selects young journalists from throughout the world as World Press Institute Fellows. For nine months these newsmen participate in a program that includes intensive study, internships and travel.

This year's participants are from Austria, Brazil, Colombia, Finland, Hungary, India, Jamaica, Lebanon, Malaysia, New Zealand, Nigeria and Vietnam.

The Fellows will be accompanied on their visit to Oak Ridge by C. T. Miller, Executive Director of the World Press Institute. Miller explained that the goal of the Institute is to insure that international opinion about the United States is shaped by journalists writing from a comprehensive background of experience in America.

"The Institute seeks to achieve this by providing young foreign journalists with an open and unfettered view of American society at every level so that they may return home with new-found ability to report and interpret U. S. affairs more accurately and with deeper understanding," Miller said.

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NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

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